

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 1 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

U.S. PATENT DOCUMENTS

| Examiner Initials | Cite No. ¹ | U.S. Patent Number Number-Kind Code ² (if known) | Issue Date (MM-DD-YYYY) | Name of Patentee |
|-------------------|-----------------------|--|----------------------------|--------------------------|
| | AA | 7,131,979 B2 | 11-07-2006 | DiCarlo et al. |
| | AB | 7,125,382 B2 | 10-24-2006 | Zhou et al. |
| | AC | 7,042,184 B2 | 05-09-2006 | Oleynikov et al. |
| | AD | 7,013,177 B1 | 03-14-2006 | Whitchurst et al. |
| | AE | 7,003,352 B1 | 02-21-2006 | Whitchurst, Todd K. |
| | AF | 6,991,617 | 01-31-2006 | Hektner et al. |
| | AG | 6,960,227 B2 | 11-01-2005 | Jones et al. |
| | AH | 6,959,215 B2 | 10-25-2005 | Gliner et al. |
| | AI | 6,953,589 B1 | 10-11-2005 | Trautman et al. |
| | AJ | 6,950,707 B2 | 09-27-2005 | Whitchurst, Todd K. |
| | AK | 6,929,636 B1 | 08-16-2005 | Von Alten, Thomas W. |
| | AL | 6,925,357 B2 | 08-02-2005 | Wang et al. |
| | AM | 6,921,413 B2 | 07-26-2005 | Mahadevan-Janssen et al. |
| | AN | 6,920,359 B2 | 07-19-2005 | Meadows et al. |
| | AO | 6,890,303 B2 | 05-10-2005 | Fitz, Matthew Joseph |
| | AP | 6,861,001 B2 | 03-01-2005 | Lee et al. |
| | AQ | 6,855,115 B2 | 02-15-2005 | Fonseca et al. |
| | AR | 6,849,183 B2 | 02-01-2005 | Gorsuch et al. |
| | AS | 6,824,561 B2 | 11-30-2004 | Soykan et al. |
| | AT | 6,797,522 B1 | 09-28-2004 | Still et al. |
| | AU | 6,773,429 B2 | 08-10-2004 | Sheppard, Jr. et al. |
| | AV | 6,764,441 B2 | 07-20-2004 | Chiel et al. |
| | AW | 6,755,803 B1 | 06-29-2004 | Le et al. |
| | AX | 6,743,211 B1 | 06-01-2004 | Prausnitz et al. |
| | AY | 6,735,475 B1 | 05-11-2004 | Whitchurst et al. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 2 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

U.S. PATENT DOCUMENTS

| Examiner Initials | Cite No. ¹ | U.S. Patent Number Number-Kind Code ² (if known) | Issue Date (MM-DD-YYYY) | Name of Patentee |
|-------------------|-----------------------|--|----------------------------|-----------------------|
| | AZ | 6,712,835 B2 | 03-30-2004 | Mazzocchi et al. |
| | BA | 6,679,893 B1 | 01-20-2004 | Tran, Quang Q. |
| | BB | 6,673,363 B2 | 01-06-2004 | Luo et al. |
| | BC | 6,669,683 B2 | 12-30-2003 | Santini, Jr. et al. |
| | BD | 6,632,216 B2 | 10-14-2003 | Houzego et al. |
| | BE | 6,616,676 B2 | 09-09-2003 | Bashiri et al. |
| | BF | 6,607,553 | 08-19-2003 | Healy et al. |
| | BG | 6,597,954 B1 | 07-22-2003 | Pless et al. |
| | BH | 6,591,137 B1 | 07-08-2003 | Fischell et al. |
| | BI | 6,585,763 B1 | 07-01-2003 | Keilman et al. |
| | BJ | 6,512,950 B2 | 01-28-2003 | Li et al. |
| | BK | 6,464,687 B1 | 10-15-2002 | Ishikawa et al. |
| | BL | 6,436,120 B1 | 08-20-2002 | Meglin, Allen J. |
| | BM | 6,409,674 B1 | 06-25-2002 | Brockway et al. |
| | BN | 6,402,678 B1 | 06-11-2002 | Fischell et al. |
| | BO | 6,398,280 B1 | 06-04-2002 | Parker et al. |
| | BP | 6,372,248 B1 | 04-16-2002 | Qin et al. |
| | BQ | 6,337,997 B1 | 01-08-2002 | Risc, Mark T. |
| | BR | 6,322,532 B1 | 11-27-2001 | D'Sa et al. |
| | BS | 6,278,379 B1 | 08-21-2001 | Allen et al. |
| | BT | 6,255,361 B1 | 07-03-2001 | Rajagopalan et al. |
| | BU | 6,219,577 B1 | 04-17-2001 | Brown, III et al. |
| | BV | 6,187,599 B1 | 02-13-2001 | Asher et al. |
| | BW | 6,185,452 B1 | 02-06-2001 | Schulman et al. |
| | BX | 6,170,488 B1 | 01-09-2001 | Spillman, Jr., et al. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 3 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

U.S. PATENT DOCUMENTS

| Examiner Initials | Cite No. ¹ | U.S. Patent Number Number-Kind Code ² (if known) | Issue Date (MM-DD-YYYY) | Name of Patentee |
|-------------------|-----------------------|--|----------------------------|-----------------------|
| | BY | 6,164,284 | 12-26-2000 | Schulman et al. |
| | BZ | 6,159,230 | 12-12-2000 | Samuels, Shaun L.W. |
| | CA | 6,134,474 | 10-17-2000 | Fischell et al. |
| | CB | 6,128,538 | 10-03-2000 | Fischell et al. |
| | CC | 6,111,520 | 08-29-2000 | Allen et al. |
| | CD | 6,022,316 | 02-08-2000 | Eppstein et al. |
| | CE | 6,016,449 | 01-18-2000 | Fischell et al. |
| | CF | 6,964,773 | 10-12-1999 | Greenstein, Robert J. |
| | CG | 5,873,835 | 02-23-1999 | Hastings et al. |
| | CH | 5,843,139 | 12-01-1998 | Goedecke et al. |
| | CI | 5,830,207 | 11-03-1998 | Leeb et al. |
| | CJ | 5,830,179 | 11-03-1998 | Mikus et al. |
| | CK | 5,831,012 | 11-03-1998 | Nilsson et al. |
| | CL | 5,804,563 | 09-08-1998 | Still et al. |
| | CM | 5,782,798 | 07-21-1998 | Rise, Mark T. |
| | CN | 5,728,089 | 03-17-1998 | Lal et al. |
| | CO | 5,705,293 | 01-01-1998 | Hobson, David O. |
| | CP | 5,662,587 | 09-02-1997 | Grundfest et al. |
| | CQ | 5,624,398 | 04-29-1997 | Smith et al. |
| | CR | 5,610,488 | 03-11-1997 | Miyazawa, Osamu |
| | CS | 5,569,968 | 11-29-1996 | Lal et al. |
| | CT | 5,574,347 | 11-12-1996 | Neubauer, Werner |
| | CU | 5,554,914 | 09-10-1996 | Miyazawa, Osamu |
| | CV | 5,497,147 | 03-05-1996 | Arms et al. |
| | CW | 5,386,741 | 02-07-1995 | Rennex, Brian G. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 4 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

U.S. PATENT DOCUMENTS

| Examiner Initials | Cite No. ¹ | U.S. Patent Number Number-Kind Code ² (if known) | Issue Date (MM-DD-YYYY) | Name of Patentee |
|-------------------|-----------------------|--|----------------------------|--------------------|
| | CX | 5,338,625 | 08-16-1994 | Bates et al. |
| | CY | 5,337,732 | 08-16-1994 | Grundfest et al. |
| | CZ | 5,335,657 | 08-09-1994 | Terry, Jr. et al. |
| | DA | 5,314,451 | 05-24-1994 | Mulier, Peter M.J. |
| | DB | 5,279,607 | 01-18-1994 | Schentag et al. |
| | DC | 5,269,303 | 12-14-1993 | Wernicke et al. |
| | DD | 5,019,372 | 05-28-1991 | Folkman et al. |
| | DE | 4,771,772 | 09-20-1988 | DeWitt, James L. |

U.S. PATENT APPLICATION DOCUMENTS

| Examiner Initials | Cite No. ¹ | U.S. Patent Application Publication Number Number-Kind Code ² (if known) | Publication Date (MM-DD-YYYY) | Name of Applicant |
|-------------------|-----------------------|---|----------------------------------|-------------------|
| | DF | 2006/0119304 A1 | 06-08-2006 | Farritor et al. |
| | DG | 2006/0004395 A1 | 01-05-2006 | Chiel et al. |
| | DH | 2005/0278020 A1 | 12-15-2005 | Wang et al. |
| | DI | 2005/0238689 A1 | 10-27-2005 | Carpenter et al. |
| | DJ | 2005/0221529 A1 | 10-06-2005 | Bang et al. |
| | DK | 2005/0216074 A1 | 09-29-2005 | Sahatjian et al. |
| | DL | 2005/0203613 A1 | 09-15-2005 | Amey et al. |
| | DM | 2005/0182482 A1 | 08-18-2005 | Wang et al. |
| | DN | 2005/0126916 A1 | 06-16-2005 | Lockard et al. |
| | DO | 2005/0121411 A1 | 06-09-2005 | Cohen, Adam L. |
| | DP | 2005/0113460 A1 | 05-26-2005 | Glick, Gary D. |
| | DQ | 2005/0079132 A1 | 04-14-2005 | Wang et al. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 5 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

U.S. PATENT APPLICATION DOCUMENTS

| Examiner Initials | Cite No. ¹ | U.S. Patent Application Publication Number Number-Kind Code ² (if known) | Publication Date (MM-DD-YYYY) | Name of Applicant |
|-------------------|-----------------------|--|----------------------------------|----------------------|
| | DR | 2005/0069925 A1 | 03-31-2005 | Ford et al. |
| | DS | 2005/0065592 A1 | 03-24-2005 | Holzer, Asher |
| | DT | 2004/0225325 A1 | 11-11-2004 | Bonutti, Peter M. |
| | DU | 2004/0073190 A1 | 04-15-2004 | Deem et al. |
| | DV | 2004/0064093 A1 | 04-01-2004 | Hektner et al. |
| | DW | 2004/0018508 A1 | 01-29-2004 | Friedman, Stephen B. |
| | DX | 2003/0220556 A1 | 11-27-2003 | Porat et al. |
| | DY | 2003/0152823 A1 | 08-14-2003 | Heller, Adam |
| | DZ | 2003/0065358 A1 | 04-03-2003 | Freckler et al. |
| | EA | 2002/0198604 A1 | 12-26-2002 | Schulman et al. |
| | EB | 2002/0147480 A1 | 10-10-2002 | Mamayek, Donald S. |
| | EC | 2002/0090388 A1 | 07-11-2002 | Humes et al. |

FOREIGN PATENT DOCUMENTS

| Examiner Initials | Cite No. ¹ | Foreign Patent Document Country Code ² Number ³ Kind Code ⁵ (if known) | Publication Date (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | T ⁶ |
|-------------------|-----------------------|---|----------------------------------|---|----------------|
| | ED | JP 2005-74229 | 03-24-2005 | Japan | No |
| | EE | WO 03/106966 A2 | 12-24-2003 | Heller et al. | yes |
| | EF | WO 99/20335 | 04-29-1999 | Samuels, Shaun L. | Yes |
| | EG | WO 98/14243 | 04-09-1998 | Chen et al. | Yes |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds of Code of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 6 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|--|
| EH | | "001_08 Comparison of Capsule Cameras: M2A (Given Imaging) vs. NORIKA3 (RF System lab)" RF System lab; bearing dates of 2001-2004; pp. 1-2; located at http://www.rfnorika.com/enr/system/svs_008.html ; printed on 5/04/2006 |
| EI | | "A Hydrogel-based CO2 sensor"; BIOS - The lab on a chip group; bearing a date of 08/29/2005; pp. 1-2; located at: http://bios.cwi.utwente.nl/research/analysis/systemssensors/ahydrogelbased.doc/index.html ; printed on 04/25/2006; University of Twente; the Netherlands |
| EJ | | AGARWAL, ABHISHEK K.; ATENCIA, JAVIER; BEEBE, DAVID J.; JIANG, HONGRUI; "Magnetically-driven temperature-controlled microfluidic actuators"; pp. 1-5; located at: http://www.unl.im.dendai.ac.jp/INSS2004/INSS2004_papers/OralPresentations/C2.pdf |
| EK | | "Agile new plastics change shape with heat"; MIT News Office; November 20, 2006; pp. 1-4; Massachusetts Institute of Technology; printed on 11/22/2006; located at http://web.mit.edu/newsoffice/2006/triple-shape.html |
| EL | | "Agile new plastics change shape with heat"; MIT Tech Talk; November 22, 2006; p. 5 (1 page) |
| EM | | ANANTHASWAMY, ANIL; "First robot moved by muscle power"; bearing a date of 2/27/2004; pp. 1-3; New Scientist; located at http://www.newscientist.com/article.ns?id=dn4714 ; printed on 9/12/2006 |
| EN | | ASARI, VIJAYAN K.; KUMAR, SANJIV; KASSIM, IRWAN M.; "A Fully Autonomous Microrobotic Endoscopy System"; Journal of Intelligent and Robotic Systems; bearing a date of 2000; pp. 325-341; Volume 28; Kluwer Academic Publishers |
| EO | | BEHKAM, BAHAREH; SITTI, METIN; "TOWARDS HYBRID SWIMMING MICROROBOTS: BACTERIA ASSISTED PROPULSION OF POLYSTYRENE BEADS"; Proceedings of the 28 th IEEE EMBS Annual International Conference; bearing dates of 8/30/2006-9/03/2006 and 2006; pp. 2421-2424; IEEE |
| EP | | BERLINGER, NORMAN T.; "Robotic Surgery - Squeezing into Tight Places"; New England Journal of Medicine; bearing dates of 5/17/2006, 5/18/2006, and 2006; pp. 2099-2101; Massachusetts Medical Society; located at www.nejm.org |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is intended to take 2 hours to consider, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 7 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume- issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|--|
| EQ | | BEZROUK, A.; HANUS, J.; ZÁHORA, J.; "TEMPERATURE CHARACTERISTICS OF NITINOL SPIRAL STENTS"; SCRIPTA MEDICA (BRNO); bearing dates of 08/2005, 10/2005; pp. 219-226; Vol. 78, No. 4 |
| ER | | BIALEK, WILLIAM; RIEKE, FRED; DE RUYTER VAN STEVENINCK, ROB R.; WARLAND, DAVID; "Reading a Neural Code"; Science; bearing a date of 06/28/1991; pp. 1854-1857; Vol. 252 |
| ES | | BUCHER, VOLKER; GRAF, MICHAEL; STELZLE, MARTIN; NISCH, WILFRIED; "Low-Impedance Thin-Film Polycrystalline Silicon Microelectrodes for Extracellular Stimulation and Recording"; Biosensors and Bioelectronics; bearing a date of 1999; pp. 639-649; Vol. 14; Elsevier Science S.A.; located at: www.elsevier.com/locate/bios |
| ET | | BUTSON, CHRISTOPHER R.; MCINTYRE, CAMERON C.; "Role of Electrode Design on the Volume of Tissue Activated During Deep Brain Stimulation"; Journal of Neural Engineering; bearing a date of 2006; Vol. 3; pp. 1-8; IOP Publishing Ltd |
| EU | | CHANG, SUK TAI; PAUNOV, VESSELIN N.; PETSEV, DIMITR N.; VELEV, ORLIN D.; "Articles: Remotely Powered Self-Propelling Particles and Micropumps Based on Miniature Diodes"; Nature Materials; bearing a date of 2007; pp. 1-6; Nature Publishing Group; located at: www.nature.com/naturematerials |
| EV | | CHEN, HAITAO; EBNER, ARMIN D.; RITTER, JAMES A.; KAMINSKI, MICHAEL D.; ROSENGART, AXEL J.; "Sequestration of Blood-Borne Magnetic Drug Carrier Particles Using Magnetizable Intravascular Stents"; Collaborative Investigators for Applied Nanotechnology in Medicine; pp. 1; Chicago, Illinois. |
| EW | | CHEN, TING; BARTON, SCOTT CALABRESE, BINYAMIN, GARY; GAO, ZHIQIANG; ZHANG, YONGCHAO, KIM, HYUG-HAN; HELLER, ADAM; "A Miniature Biofuel Cell"; Journal of the American Chemical Society; 08-11-2001; pp. 8630-8631; Vol. 123; 2001 American Chemical Society |
| EX | | CHRISTENSEN, BILL; "Musclebot: Microrobot with a Heart"; Technovelgy.com; pp. 1-2; bearing a date of 2/27/2004; located at http://www.technovelgy.com/ct/Science-Fiction-News.asp?NewsNum=46 ; printed on 9/12/2006 |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 8 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials ¹ | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|--------------------------------|-----------------------|---|
| EY | | CHRISTENSEN, BILL; "Propulsion System for 'Fantastic Voyage' Robot"; Technovelgy.com; pp. 1-4; Technovelgy.com; located http://www.technovelgy.com/ct/Science-Fiction-News.asp?NewsNum=811 ; printed on 1/4/2007 |
| EZ | | COSTAMAGNA; GUIDO M.D.; "PillCam™ SB Capsule Endoscopy"; Given Imaging.com; bearing dates of 2001-2006; pp. 1-4; located at http://www.givenimaging.com/Cultures/en-US/Given/English/Products/CapsuleEndoscopy/ ; printed on 5/04/2006 |
| FA | | CUI, XINYAN; HETKE, JAMILL F.; WILER, JAMES A.; ANDERSON, DAVID J.; MARTIN, DAVID C.; "Electrochemical Deposition and Characterization of Conducting Polymer Polypyrrole/PPS on Multichannel Neural Probes"; Sensors and Actuators A Physical; bearing a date of 2001; pp. 8-18; Vol. 93; Elsevier Science B.V.; located at: www.elsevier.com/locate/sna |
| FB | | DARIO, P.; CARROZZA, M.C.; LENCIONI, L.; MAGNANI, B.; D'ATTANASIO, S.; "A Micro Robotic System for Colonoscopy"; Proceedings of the 1997 IEEE International Conference on Robotics and Automation; bearing dates of 04/1997 and 1997; pp. 1567-1572; IEEE |
| FC | | DILLIER, NORBERT; LAI, WAI KONG; ALMQVIST, BENGT; FROHNE, CAROLIN; MÜLLER-DEILE, JOACHIM; STECKER, MATTHIAS; VON WALLENBERG, ERNST; "Measurement of the Electrically Evoked Compound Action Potential Via a Neural Response Telemetry System"; Annals Of Otolary Rhinology and Laryngology; bearing a date of 05/2002; pp. 407-414; Vol. 111, No. 5; Annals Publishing Company |
| FD | | DONGXIANG, CHI; GUOZHENG, YAN; "An earthworm based miniature robot for intestinal inspection"; Proceedings of SPIE; bearing dates of 11/07/2001-11/09/2001; pp. 396-400; Volume 4601; SPIE |
| FE | | DONOGHUE, JOHN P.; "Review: Connecting Cortex to Machines: Recent Advances in Brain Interfaces"; Nature Neuroscience Supplement; bearing a date on 11/2002; pp. 1085-1088; Vol. 5; Nature Publishing Group; located at: http://www.nature.com/natureneuroscience |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|---------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 9 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|---|
| | FF | FANG, ZI-PING; MORTIMER, J. THOMAS; "Selective Activation of Small Motor Axons by Quasitrapezoidal Current Pulses"; IEEE Transactions on Biomedical Engineering; bearing a date of 02/1991; pp. 168-174; Vol. 38, No. 2; IEEE |
| | FG | FIACCABRINO, G.C.; TANG, X.-M.; SKINNER, N.; DE ROOIJ, N.F.; KOUDELKA-HEP, M.; "Electrochemical Characterization of Thin-Film Carbon Interdigitated Electrode Arrays"; Analytica Chimica Acta; bearing a date of 1996; pp. 155-160; Vol. 326; Elsevier Science B.V. |
| | FH | FREITAS JR., ROBERT A.; "8.2.1.2 Arteriogenous Microcirculation"; "9.4.3.5 Legged Ambulation"; "9.4.3.6 Tank-Tread Rolling"; "9.4.3.7 Amoeboid Locomotion"; "9.4.3.8 Inchworm Locomotion"; "Nanomedicine Volume I: Basic Capabilities"; bearing a date of 1999; pp. 211-214, pp. 316-318; Landes Bioscience; Georgetown, Texas, USA |
| | FI | GITTER, ALFRED H.; FROMM, MICHAEL; SCHULZKE, JÖRG-DIETER; "Impedance Analysis for the Determination of Epithelial and Subepithelial Resistance in Intestinal Tissues"; Journal of Biochemical and Biophysical Methods, bearing a date of 1998; pp. 35-46; Vol. 37; Elsevier Science B.V. |
| | FJ | GODA, YUKIKO; COLICOS, MICHAEL A.; "Protocol: Photoconductive Stimulation of Neurons Cultured on Silicon Wafers"; Nature Protocols; bearing a date of 2006; pp. 461-467; Vol. 1, No. 1; Nature Publishing Group; located at: http://www.nature.com/natureprotocols |
| | FK | GOZANI, SHAI N.; MILLER, JOHN P.; "Optimal Discrimination and Classification of Neuronal Action Potential Waveforms from Multiunit, Multichannel Recordings Using Software-Based Linear Filters"; IEEE Transactions on Biomedical Engineering; bearing a date of 04/1994; pp. 358-372; Vol. 41, No. 4; IEEE |
| | FL | GRAY, CHARLES M.; MALDONADO, PEDRO E.; WILSON, MATHEW; MCNAUGHTON, BRUCE; "Tetodes Markedly Improve the Reliability and Yield of Multiple Single-Unit Isolation from Multi-Unit Recordings in Cat Striate Cortex"; Journal of Neuroscience Methods; bearing a date of 1995; pp. 43-54; Vol. 63; Elsevier Science B.V. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 10 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|--|
| | FM | HAGLEITNER, C.; HIERLEMANN, A.; LANGE, D.; KUMMER, A.; KERNESS, N.; BRAND, O.; BALTES, H.; "Smart single-chip gas sensor microsystem"; Nature; November 15, 2001; pp. 293-296; Vol. 414; Macmillan Magazines Ltd.; www.nature.com |
| | FN | HANNA, DARRIN M.; OAKLEY, BARBARA A.; STRYKER, GABRIELLE A.; "Using a System-on-Chip Implantable Device to Filter Circulating Infected Cells in Blood or Lymph"; IEEE Transactions on Biomedical Engineering; bearing dates of January 25, 2003, March 2003; pp. 6-13; Vol. 2, No. 1; IEEE |
| | FO | HODGKIN, A.L.; HUXLEY, A.F.; "A Quantitative Description of Membrane Current and its Application to Conduction and Excitation in Nerve"; Journal of Physiology; bearing a date of 1952; pp. 500-544; Vol. 117 |
| | FP | HÖEG, H.D.; SLATKIN, A.B.; BURDICK, J.W.; GRUNDFEST, DR. WARREN S.; "Biomechanical Modeling of the Small Intestine as Required for the Design and Operation of a Robotic Endoscope"; Proceedings ICRA '00 IEEE International Conference on Robotics and Automation; 4/24/2000-4/28/2000; pp. 1-8; Volume 2 |
| | FQ | HOFMANN, U.G.; FOLKERS, A.; MÖSCH, F.; HÖHL, D.; KINDLUNDH, M.; NORLIN, P.; "A 64(128)-Channel Multisite Neuronal Recording System"; bearing a date of 2002; pp. 1-4 |
| | FR | IKEUCHI, K.; YOSHINAKA, K.; HASHIMOTO, S.; TOMITA, N.; "Locomotion of Medical Micro Robot with Spiral Ribs Using Mucus"; Seventh International Symposium on Micro Machine and Human Science; bearing a date of 1996; pp. 217-222; IEEE |
| | FS | INMANN, ANDREAS; HAUGLAND, MORTEN; HAASE, JENS; BIERING-SØRENSEN, FIN; SINKJAER, THOMAS; "NeuroReport: Signals from Skin Mechanoreceptors used in Control of a Hand Grasp Neuroprosthesis"; Motor Systems; bearing a date of 09/17/2001; pp. 2817-2819; Vol. 12, No. 13; Lippincott Williams & Wilkins |
| | FT | JANDERS, M.; EGERT, U.; STELZE, M.; NISCH, W.; "Novel Thin Film Titanium Nitride Micro-Electrodes with Excellent Charge Transfer Capability for Cell Stimulation and Sensing Applications"; IEEE Engineering in Medicine and Biology Society; bearing a date of 1996; pp. 245-247; IEEE |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 11 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|--|
| FU | | "Japanese Researchers Unveil Medical Mini Robot"; Yahoo! News; bearing a date of 03/08/2007; pp. 1-2; Yahoo! Inc.; located at: http://news.yahoo.com/s/afp/20070308/hl_afp/afplifestylehealthscience ; printed on 03/08/2007 |
| FV | | JI, JIN; NAJAFI, KHALIL, WISE, KENSALL D.; "A Low-Noise Demultiplexing System for Active Multichannel Microelectrode Arrays"; IEEE Transactions of Biomedical Engineering; bearing a date of 01/1991; pp. 77-81; Vol. 38, No. 1; IEEE |
| FW | | KASSIM, IRWAN; PHEE, LOUIS; NG, WAN S.; GONG, FENG; DARIO, PAOLO; MOSSE, CHARLES A.; "Locomotion Techniques for Robotic Colonoscopy"; IEEE ENGINEERING IN MEDICINE AND BIOLOGY MAGAZINE; bearing dates of May/June 2006 and 2006; pp. 49-56; IEEE |
| FX | | KENNEDY, P.R.; BAKAY, R.A.E.; MOORE, M.M.; ADAMS, K.; GOLDWATHE, J.; "Direct Control of a Computer from the Human Central Nervous System"; IEEE Transactions on Rehabilitation Engineering; bearing a date of 06/2000; pp. 198-202; Vol. 8, No. 2; IEEE |
| FY | | KOBETIC, RUDI; TRILO, RONALD J.; UHLIR, JAMES P.; BIERI, CAROLE; WIBOWO, MICHAEL; POLANDO, GORDIE; MARSOLAIS, E. BYRON; DAVIS JR., JOHN A.; FERGUSON, KATHLEEN A.; SHARMA, MUKUT; "Implanted Functional Electrical Stimulation System for Mobility in Paraplegia: A Follow-Up Case Report"; IEEE Transactions on Rehabilitation Engineering; bearing a date of 12/1999; pp. 390-398; Vol. 7, No. 4; IEEE |
| FZ | | KRUEGER, CURTIS; "New light on blood testing"; October 20, 2006; pp. 1-2; St. Petersburg Times; printed on 10/24/2006; located at http://www.sptimes.com/2006/10/20news_pf/Tampabay/New_light_on_blood_te.shtml |
| GA | | LANGER, ROBERT; PEPPAS, NICHOLAS A.; "Advances in Biomaterials, Drug Delivery, and Bionanotechnology"; AIChE Journal - BIOENGINEERING, FOOD, AND NATURAL PRODUCTS; December 2003; pp. 2990-3006; Vol. 49, No. 12 |
| GB | | LOEB, G.E.; PECK, R.A.; MARTYNIUK, J.; "Toward the Ultimate Metal Microelectrode"; Journal of Neuroscience Methods; bearing a date of 1995; pp. 175-183; Vol. 63; Elsevier Science B.V. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Entry Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 12 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|---|
| | GC | LOEB, GERALD E.; PECK, RAYMOND A.; MOORE, WILLIAM H.; HOOD, KEVIN; "BION System for Distributed Neural Prosthetic Interfaces"; Medical Engineering and Physics; bearing a date of 2001; pp. 9-18; Vol. 23; Elsevier Science Ltd.; located at: www.elsevier.com/locate/medengphys |
| | GD | LU, ZHAO; MARTEL, SYLVAIN; "Preliminary Investigation of Bio-carriers Using Magnetotactic Bacteria"; Proceedings of the 28 th IEEE EMBS Annual International Conference; bearing dates of 8/30/2006-9/03/2006 and 2006; pp. 3415-3418; IEEE |
| | GE | MANGAN, ELIZABETH V.; KINGSLEY, DAN A.; QUINN, ROGER D.; CHIEL, HILLEL J.; "Development of a Peristaltic Endoscope"; IEEE International Conference on Robotics & Automation 2002; pp. 1-6; located at http://biorobots.cwrw.edu/publications/ICRA02_Mangan_Endoscope.pdf |
| | GF | MARKS, WILLIAM B.; LOEB, GERALD E.; "Action Currents, Internodal Potentials, and Extracellular Records of Myelinated Mammalian Nerve Fibers Derived from Node Potentials"; Biophysical Journal; 1976; pp. 655-668; Vol. 16 |
| | GG | MARTEL, SYLVAIN; "Fundamentals of high-speed piezo-actuated three-legged motion for miniature robots designed for nanometer-scale operations"; pp. 1-8 |
| | GH | MARTEL, SYLVAIN; "Towards MRI-Controlled Ferromagnetic and MC-1 Magnetotactic Bacterial Carriers for Targeted Therapies in Arteriolo-capillary Networks Stimulated by Tumoral Angiogenesis"; Proceedings of the 28 th IEEE EMBS Annual International Conference; bearing dates of 8/30/2006-9/03/2006 and 2006; pp. 3399-3402; IEEE |
| | GI | MARTEL, SYLVAIN; MATHIEU, JEAN-BAPTISTE; FELFOUL, OUAJDI; CHANU, ARNAUD; ABOUSSOUAN, ERIC; TAMAZ, SAMER; POUPONNEAU, PIERRE; "Automatic Navigation of an Unethiered Device in the Poupy of a Living Animal using a Conventional Clinical Magnetic Resonance Imaging System"; Applied Physics Letters; 2007; pp. 114105-1 - 114105-3; Vol. 90, No. 114105; American Institute of Physics |
| | GJ | MATHIEU, J-B.; MARTEL, S.; YAHIA, L'H.; SOULEZ, G.; BEAUDOIN, G.; "MRI Systems as a Mean of Propulsion for a Microdevice in Blood Vessels"; bearing a date of 2003; pp. 3419-3422; IEEE |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 13 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|--|
| GK | | MATSUI, TAKEMI; MATSUMURA, KOUJI; HAGISAWA, KOUSUKE; ISHIHARA, MASAYUKI; ISHIZUKA, TOSHIKI; SUZUKI, MINORU; KURITA, AKIRA; KIKUCHI, MAKOTO; "A Novel Ferromagnetic Thermo-Stent for Plaque Stabilization That Self-Regulates the Temperature"; IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING; bearing dates of 06/2002 and 2002; pp. 621-623; Vol. 49, No. 6; IEEE |
| GL | | MCNEAL, DONALD R.; "Analysis of a Model for Excitation of Myelinated Nerve"; IEEE Transactions on Biomedical Engineering; bearing a date of 07/1976; pp. 329-337; Vol. BME-23, No. 4 |
| GM | | MEIER, P.; OBERTHÜR, S.; LANG, M.; "Development of a compliant device for minimally invasive surgery"; Proceedings of the 28 th IEEE EMBS Annual International Conference; bearing dates of 8/30/2006-9/03/2006 and 2006; pp. 331-334; IEEE |
| GN | | "MEMS at the cutting edge®; Patent Pending"; VERIMETRA; pp. 1-2; located at http://www.verimetra.com/flow.htm ; printed on 5/04/2006 |
| GO | | MENCIASSI, A.; PARK, JONG H.; LEE, S.; GORINI, S.; DARIO, P.; PARK, JONG-OH; "Robotic Solutions and Mechanisms for a Semi-Autonomous Endoscope"; Proceedings of the 2002 IEEE/RSJ International Conference on Intelligent Robots and Systems; bearing a date of 2002; pp. 1379-1384; IEEE |
| GP | | MOHSENI, KAMRAN; "Biomimetic & Bio-Inspired Aerial and Underwater Vehicles"; bearing a date of 09-23-2006; pp. 1-10; printed on 01/04/2007; located at http://ensitrophv.colorado.edu/~mohseni/MicroVehicles1.html#UUV1#UUV1 |
| GQ | | MOSSE, CHARLES; MILLS, TIM; APPLEYARD, MARK; SWAIN, PAUL; "Electrostimulation to move endoscopes in the small bowel"; Proceedings of SPIE; bearing a date of 2001; pp. 24-28; Volume 4158 |
| GR | | MURTHY, S. NARASIMHA; HIREMATH, SHOBHA RANI R.; "Physical and Chemical Permeation Enhancers in Transdermal Delivery of Terbutaline Sulphate"; AAPS PharmSciTech; bearing a date of 2001; pp. 1-5; Vol. 2001, 2(1); Technical Note 1; located at http://www.pharmscitech.com/ |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Entry Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 14 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|--|
| GS | | NAKAYAMA, YASUhide; JI-YOUN, KIM; NISHI, SHOGO; UENO, HIKARU; MATSUDA, TAKEHISA; "Development of high-performance stent: gelatinous photogel-coated stent that permits drug delivery and gene transfer"; J Biomed Mater Res; bearing dates of 11/13/2000, 04/23/2001, 05/10/2001 and 2001; pp. 559-566; Vol. 57; John Wiley & Sons, Inc. |
| GT | | NAQVI, NASIR H.; RUDRAUF, DAVID; DAMASIO, HANNA; BECHARA, ANTOINE; "Damage to the Insula Disrupts Addition to Cigarette Smoking"; Science; bearing a date of 01/26/2007; pp. 531-534; Vol. 315, No. 531; located at: www.sciencemag.org ; printed on 01/25/2007 |
| GU | | NETO, A.M. FIGUEIREDO; GODINHO, M.H.; TOTH-KATONA, T.; PALFFY-MUHORAY, P.; "Optical, Magnetic and Dielectric Properties of Non-Liquid Crystalline Elastomers Doped with Magnetic Colloids"; Brazilian Journal of Physics; Bearing a date of March 2005; pp. 184-189; Volume 35, Number 1 |
| GV | | "New Medical Device Combines Wireless and MEMS Technology"; Georgia Institute of Technology; pp. 1-4; PhysOrg.com; located at: http://www.physorg.com/printnews.php?newsid=10533 ; printed on 02/20/2006 |
| GW | | NIEUWENHUIZEN-BERKOVITS, P.; "lubrelastic medical appliances"; Lubrelastic Medical Appliances; pp. 1-4; located at: http://www.xs4all.nl/~plien070/caengc.html ; printed on 02/20/2006 |
| GX | | NYITRAI, ZSOLT; ILLYEFALVI-VITÉZ, ZSOLT; PINKOLA, JÁNOS; "Preparing Stents with Masking & Etching Technology"; 26 th International Spring Seminar on Electronics Technology; bearing dates of 5/8/2003-5/11/2003 and 2003; pp. 321-324; IEEE |
| GY | | OLSSON III, R.H.; GULARI, M.N.; WISE, K.D.; "Poster 114: Silicon Neural Recording Arrays with On-Chip Electronics for <i>In-Vivo</i> Data Acquisition"; Microtechnologies in Medicine and Biology; bearing dates of 05/02/2002-05/04/2002; pp. 237-240; IEEE |
| GZ | | OWEISS, KARIM G.; ANDERSON, DAVID J.; "A New Technique for Blind Source Separation Using Subband Subspace Analysis in Correlated Multichannel Signal Environments"; bearing a date of 2001; pp. 2813-2816; IEEE |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 15 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|---|---|
| HA | PATRONIK, N.A.; OTA, T.; ZENATI, M.A.; RIVIERE, C.N.; "Improved Traction for a Mobile Robot Traveling on the Heart"; Proceedings of the 28 th IEEE EMBS Annual International Conference; bearing dates of 8/30/2006-9/03/2006 and 2006; pp. 339-342; IEEE | |
| HB | PCT International Search Report App. No.: PCT/US05/33475; dated 05 September 2006; pp. 1-2. | |
| HC | PECKHAM, P. HUNTER; KNUTSON, JAYME S.; "Functional Electrical Stimulation for Neuromuscular Applications"; Annual Review Biomedical Engineering; bearing a date of 2005; pp. 327-360; Vol. 7; Annual Reviews | |
| HD | RATTAY, F.; "The Basic Mechanism for the Electrical Stimulation of the Nervous System"; Neuroscience; 1999; pp. 335-346; Vol. 98. No. 2; Elsevier Science Ltd; printed on 03/15/2007 | |
| HE | RATTAY, FRANK; ABERHAM, MATTHIAS; "Modeling Axon Membranes from Functional Electrical Stimulation"; IEEE Transactions on Biomedical Engineering; bearing a date of 12/1993; pp. 1201-1209; Vol. 40, No. 12; IEEE | |
| HF | RATTAY, FRANK; "Analysis of Models for Extracellular Fiber Stimulation"; IEEE Transactions on Biomedical Engineering; bearing a date of 07/1989; pp. 676-682; Vol. 36, No. 7; IEEE | |
| HG | "Remote-Control Electrostimulation Capsule"; Popular Science; bearing dates of 2002 and 2003; pp. 1-2; located at http://www.popsi.com/popsi/brown/2003/article/0,18881,537028,00.html ; printed on 5/04/2006 | |
| HH | "Researchers: Squid-Inspired Vortex Generators Could Mean Better Propulsion for Unmanned Underwater Vehicles"; UnderwaterTimes.com; 12/12/2006; pp. 1-2; UnderwaterTimes.com; printed on 01/04/2007; located at http://www.underwatertimes.com/print.php?article_id=51030782641 | |
| HI | RICE, MIKE; "Implantable Neurostimulation Device Market Poised for Explosive Growth"; Future Fab International; 1/7/2006; pp. 1-4; printed on 10/6/2006; located at http://www.future-fab.com/documents.asp?d_ID=3725 | |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 16 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|---|
| HJ | | RICE, MIKE; "New Products, Emphasis on Miniaturization Driving Medical Device Innovation"; bearing a date 8/23/2006; pp. 1-3; Advantage Business Media; located at http://www.advantmag.com/scripts/ShowPR.asp?PUBCODE=046&ACCT=0006109&ISLUE=0603&RELTYPE=PR&PRODCODE=0790&PRODLTT=A ; printed on 8/23/2006 |
| HK | | RIEDMÜLLER, J.; BOLZ, A.; REBLING, H.; SCHALDACH, M.; "Improvement of Stimulation and Sensing Performance of Bipolar Pacemaker Leads"; IEEE Eng. Med. Biol. Soc.; 1992; pp. 2364-2365; IEEE |
| HL | | ROBINSON, DAVID A.; "The Electrical Properties of Metal Microelectrodes"; Proceedings of the IEEE; bearing a date of 06/1968; pp. 1065-1071; Vol. 56, No. 6 |
| HM | | ROUSCHÉ, PATRICK J.; PELLINEN, DAVID S.; PIVIN, DAVID P.; WILLIAMS, JUSTIN C.; VETTER, RIO J.; KIPKE, DARYL R.; "Flexible Polyimide-Based Intracortical Electrode Arrays with Bioactive Capability"; IEEE Transactions on Biomedical Engineering; bearing a date 03/2001; pp. 361-371; Vol. 48, No. 3; IEEE |
| HN | | RUTTEN, WIM; MOUVEROUX, JEAN-MARIE; BUITENWEG, JAN; HEIDA, CISKI; RUARDIJ, TEUN; MARANI, ENRICO; LAKKE, EGBERT; "Neuroelectronic Interfacing with Cultured Multielectrode Arrays Toward a Cultured Probe"; Proceedings of the IEEE; bearing a date of 07/2001; pp. 1013-1029; Vol. 89, No. 7; IEEE |
| HO | | SALTZMAN, JOHN R.; "Endoscopic Advances -- A View Toward the Future"; bearing dates of 5/04/2006, 05/17/2005, and 2005; pp. 1-4; Medscape; located at http://www.medscape.com/viewarticle/505100 ; printed on 5/04/2006 |
| HP | | SCHMIDT, W.; BEHRENS, P.; BEHREND, D.; SCHMITZ, K.-P.; ANDRESEN, R.; "Experimental Study of Peripheral, Balloon-expandable Stent Systems"; Progress in Biomedical Research; bearing a date of 05/2001; pp. 246-255 |
| HQ | | SCHOONHOVEN, R.; STEGEMAN, D.F.; "Models and Analysis of Compound Nerve Action Potentials"; Critical Reviews in Biomedical Engineering; bearing a date of 1991; pp. 47-111; Vol. 19, No. 1; CRC Press, Inc. |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Entry Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 17 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|---|---|
| HR | SENEL, SEVDA; HINCAL, A. ATILLA; "Drug permeation enhancement via buccal route: possibilities and limitations"; Journal of Controlled Release; bearing a date of 2001; pp. 133-144; Vol. 72 (2001); Elsevier; located at www.elsevier.com/locate/jconrel | |
| HS | SERRUYA, MIJAIL D.; HATSOPOULOS, NICHOLAS G.; PANINSKI, LIAM; FELLOWS, MATTHEW R.; DONOGHUE, JOHN P.; "Brief Communications: Instant Neural Control of a Movement Signal"; Nature; bearing a date of 03/14/2002; pp. 141-142; Vol. 416; Macmillan Magazines Ltd; located at: www.nature.com | |
| HT | SERRUYS, PATRICK W.; KUTRYK, MICHAEL J.B.; ONG, ANDREW T.L.; "Coronary-Artery Stents"; The New England Journal of Medicine; bearing dates of February 2, 2006 and February 15, 2006; pp. 483-495; Vol. 354;5; Massachusetts Medical Society | |
| HU | SHABALOVSKAYA, SVETLANA, A.; "Surface, corrosion and biocompatibility aspects of Nitinol as an implant material"; Bio-Medical Materials and Engineering; bearing dates of 04/04/2001, and 2002; pp. 69-109; Vol. 12; IOS Press | |
| HV | SHAHINPOOR, MOHSEN; KIM, KWANG J.; "Ionic polymer-metal composites: IV. Industrial and medical applications; Smart Materials and Structures; 2005; pp. 197-214; Vol. 14; Institute of Physics Publishing | |
| HW | SMITH, MICHAEL; "PAS: Nasal Spray Flu Vaccine Seems Safe and Effective in Young"; May 2, 2006; pp. 1-2; MedPage Today, LLC; bearing dates of 2004-2006; printed on 05/04/2006; located at http://www.medpagetoday.com/tbprint.cfm?tbid=3213 | |
| HX | SNOEK, GJ; IJZERMAN, MJ; IN 'T GROEN, FACG; STOFFERS, TS; ZILVOLD, G; "Use of the NESS Handmaster to Restore Handfunction in Tetraplegia: Clinical Experiences in Ten Patients"; Spinal Cord; bearing a date of 2000; pp. 244-249; Vol. 38; International Medical Society of Paraplegia | |
| HY | SNOW, E.S.; PERKINS, F.K.; HOUSER, E.J.; BADESCU, S.C.; REINECKE, T. L.; "Chemical Detection with a Single-Walled Carbon Nanotube Capacitor"; Science; March 25, 2005; pp. 1942-1945; Vol. 307; www.sciencemag.org | |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 18 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|-----------------------|---|
| | HZ | STOECKEL, DIETER; PELTON, ALAN; DUERIG, TOM; "Self-expanding nitinol stents: material and design considerations"; European Radiology; bearing dates of 01/28/2003, 05/22/2003, 07/01/2003, 09/03/2003, 02/2004 and 2004; pp. 292-301(1-2); Vol. 14, No. 2; Springer-Verlag GmbH-SpringerLink - Article; located at: http://www.springerlink.com/11bcgg455gtajfseqqyib43m/app/home/contribution.asp?referrer=parent&backto=issue,17,26;journal,27,147;browsepublicationsresults,444,151 ; printed on 02/22/2006 |
| | IA | STRAUSS, BRADLEY H., M.D., PH.D.; LI, CHRIS, M.D.; WHITTINGHAM, HEATHER A., M.Sc.; TIO, FERMIN O., M.D.; KUTRYK, MICHAEL J.B., M.D., PH.D.; JANICKI, CHRISTIAN, PH.D.; SPARKES, JOHN, D., M.Sc.; TORNLUUND, TODD, B.Sc.; SWEET, WILLIAM L., M.D.; "LATE EFFECTS OF LOW-ENERGY GAMMA-EMITTING STENTS IN A RABBIT ILIAC ARTERY MODEL"; Int. J. Radiation Oncology Biol. Phys.; bearing dates of 10/23/2001, 05/13/2002 and 05/15/2002 and 2002; pp. 551-561; Vol. 54, No. 2; Elsevier Science Inc. |
| | IB | STRUJIK, JOHANNES JAN; "The Extracellular Potential of a Myelinated Nerve Fiber in an Unbounded Medium and in Nerve Cuff Models"; Biophysical Journal; bearing a date of 06/1997; pp. 2457-2469; Vol. 72; Biophysical Society |
| | IC | TAYLOR, DAWN M.; HELMS TILLERY, STEPHEN I.; SCHWARTZ, ANDREW B.; "Research Article: Direct Cortical Control of 3D Neuroprosthetic Devices"; Science; bearing a date of 06/07/2002; pp. 1829-1832; Vol. 296; located at: www.sciencemag.org |
| | ID | "Tiny Robot Reduces Need For Surgery"; Pink Tentacle; bearing a date of 02/26/2007; p.1; located at http://www.pinktentacle.com/2007/02/tiny-robot-reduces-need-for-surgery ; printed on 03/08/2007 |
| | IE | "Trying to control pain can be a double-edged sword, say scientists"; PhysOrg.com; printed on 11/2/2006; pp. 1-2; located at http://www.physorg.com/printnews.php?newsid=81599312 |
| | IF | TUMMALA, R. LAL; MUKHERJEE, R.; ASLAM, D.; XI, NING; MAHADEVAN, S.; WENG, J.; "Reconfigurable Adaptable Micro-robot"; IEEE; bearing a date of 1999; pp. 687-691 |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Midway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./

| | | | |
|---|----------|------------------------|-----------------------|
| Substitute for form 1449A/PTO | | Application Number | 10/827,390 |
| SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANTS <i>(Use as many sheets as necessary)</i> | | Filing Date | April 19, 2004 |
| | | First Named Inventor | Lowell L. Wood, Jr. |
| | | Group Art Unit | 3763 |
| | | Examiner Name | Catherine S. Williams |
| Sheet | 19 of 19 | Attorney Docket Number | 0803-004-001D-000000 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-------------------|--|---|
| IG | TWARDUCH, U.M.; "Integrity of Ultramicro-Stimulation Electrodes Determined from Electrochemical Measurements"; Journal of Applied Electrochemistry; bearing a date of 1994; pp. 835-857; Vol. 24; Chapman & Hall | |
| IH | WARLAND, DAVID K.; REINAGEL, PAMELA; MEISTER, MARKUS; "Decoding Visual Information from a Population of Retinal Ganglion Cells"; bearing a date of 1997; pp. 2336-2350; The American Physiological Society | |
| II | WEIS, ROLF; MÜLLER, BERNT; FROMHERZ, PETER; "Neuron Adhesion on a Silicon Chip Probed by an Array of Field-Effect Transistors"; Physical Review Letters; bearing a date of 01/08/1996; pp. 327-330; Vol. 76, No. 2; The American Physical Society | |
| IJ | WESSBERG, JOHAN; STAMBAUGH, CHRISTOPHER R.; KRALIK, JERALD D.; BECK, PAMELA D.; LAUBACH, MARK; CHAPIN, JOHN K.; KIM, JUNG; BIGGS, S. JAMES; SRINIVASAN, MANDAYAM A.; NICOLELIS, MIGUEL A.L.; "Letters to Nature: Real-Time Prediction of Hand Trajectory by Ensembles of Cortical Neurons in Primates"; Nature; bearing a date of 11/16/2000; pp. 361-365; Vol. 408; Macmillan Magazines Ltd; located at: www.nature.com | |
| IK | WHITE, DAVE; "Mini Robot Explores, Gives you Medicine from Within"; Mobile Magazine; bearing a date of 02/27/2007; p. 1; located at: http://www.mobilemag.com/content/100/313/C11869/ ; printed on 03/08/2007 | |
| IL | YUSA, GO; MURAKI, KOJI; TAKASHINA, KEI; HASHIMOTO, KATSUSHI; HIRAYAMA, YOSHIRO; "Controlled multiple quantum coherences of nuclear spins in a nanometer-scale device"; Nature; April 21, 2005; pp. 1001-1005; Vol. 434; 2005 Nature Publishing Group; www.nature.com/nature | |
| IM | "Zyvex NanoEffector Microgrippers"; Nanotechnology at Zyvex; printed on 12/7/2006; pp. 1-2; located at http://www.zyvex.com/Products/Grippers_Features.html | |
| IN | "Zyvex NanoEffector Microgrippers"; Zyvex.com; bearing a date of 2006; pp. 1-2; Zyvex Corporation | |

OMB 0651-0031

| | | | |
|--------------------|----------------|-----------------|------------|
| Examiner Signature | /Scott Medway/ | Date Considered | 06/04/2009 |
|--------------------|----------------|-----------------|------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.M./